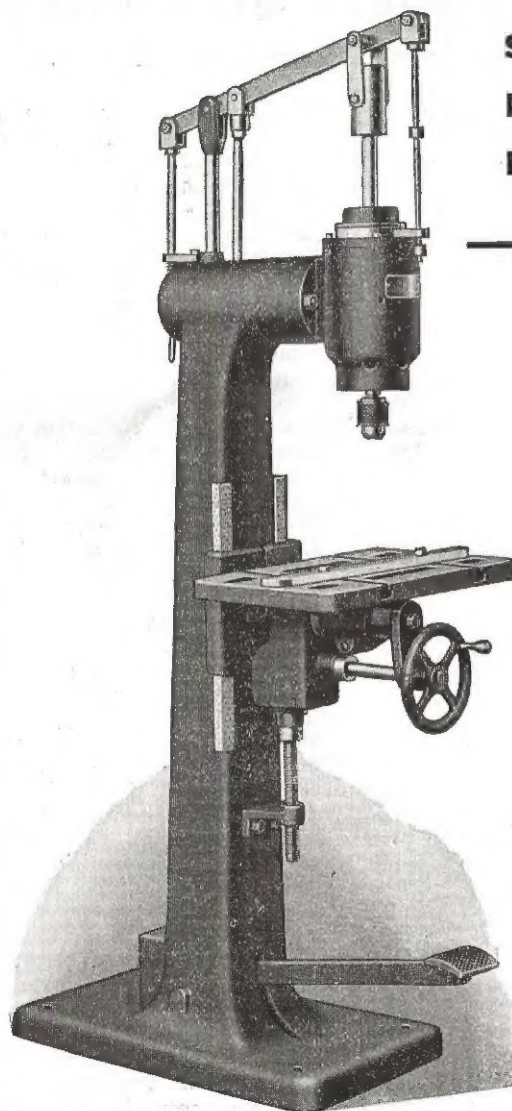


The ANDREW No. 6—

SINGLE SPINDLE MOTOR DRIVEN BORING MACHINES



SPINDLE—

Alloy Steel
Heat treated and hardened
Mounted in Ball Bearings
Spindle operates thru motor
Equipped with Jacobs Chuck (Capacity 0" to 1/2")
Stroke of Spindle—4"
Distance from face of Column to center of Spindle 10".

TABLE—

Dimensions of table 12" x 20"
Angular adjustment 45° (Right or Left)
Vertical adjustment 6"
Distance from top of table to bottom of spindle, with table at highest point 4"; at lowest point 10"

Floor Space 20"x35"

Cubic Measurements 24"x35"x65"

Write for Prices

**M. L. ANDREW
COMPANY**

3221 COLERAIN AVE.
CINCINNATI, OHIO

"Let's Talk Shop!"

Shaper Forms and Shaper Cuts

By John E. Hyler

THERE are many ideas that may be applied to the making of forms and outline patterns to be used as adjuncts at the woodworking shaper. In some plants so many forms accumulate that it is necessary to scrap all but those which may be considered as standard. In shops where odd jobs are coming along continually, the percentage of possibility for using a given form the second time within a moderate period of time, must be the standard upon which one must base his judgment. In some cases, so many of them collect eventually, that one can generally make another in less time than he could find what he wanted.

There is shown in the drawings, a useful idea for making a corner-rounding form for standard-sized small tops or similar work. This form is so made as to give access for rounding all four corners of the top without changing position of the material in the form. In addition, it allows easy mounting of the material, since the usual awkward locating cleats are replaced with upwardly-projecting dowel pins as locating members.

In Fig. 1, we have a composite view from the top, showing the form A with the rectangular work piece B, shown dotted and trimmed to net size both ways, there being shown six dowel pins holding the work piece in proper position on A. The drawing is

not correct according to drawing technique, but it is shown in this manner because the principle is revealed more clearly in this way. The workpiece B should be thought of as being shown in full view in Fig. 1, though it has been dotted into place to distinguish it from the form. The object is removal of the material at the corners D to the shape of the form. It will be noted that the form A has been so shaped as to bring the shaper cutters into easy and tangential contact before actual rounding of the corner begins. In order to stay with the grain, a double-spindle shaper would be necessary, but for rounding small corner radii like those shown, a modern high-speed shaper will do really satisfactory work,

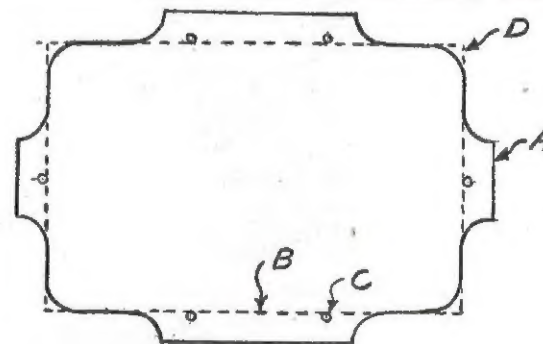


FIG. 1.



FIG. 2.